

Listing of the Claims

1. (Currently Amended) A magnetic resonance imaging system including a gradient coil system comprising an inner coil configuration (1,2,3) and an outer coil configuration (4,5,6) that is positioned substantially coaxially with said inner coil configuration, both coil configurations (1,2,3;4,5,6) being attached to a tubular body (7) located between said two coil configurations and extending substantially coaxially with both said coil configurations, characterized in thatwherein said tubular body (7) comprises stainless steel rods (10) which are positioned substantially in axial direction.
2. (Currently Amended) A system as claimed in claim 1, characterized in thatwherein stainless steel rods (10) are present in the central portion of the tubular body (7).
3. (Currently Amended) A system as claimed in any one of the preceding claims 1, characterized in thatwherein stainless steel rods (10) extend substantially over the entire length of said tubular body (7).
4. (Currently Amended) A system as claimed in any one of the preceding claims 1, characterized in thatwherein said stainless steel rods (10) are connected to each other at both ends (14) of each rod (10).
5. (Currently Amended) A system as claimed in any one of the preceding claims 1, characterized in thatwherein said tubular body (7) comprises a stainless steel cylindrical wall (12) having axial slits (13).
6. (Currently Amended) A system as claimed in any one of the preceding claims 1, characterized in thatwherein said stainless steel rods (10) are strips positioned substantially in a cylindrical plane (12,16).

7. (Currently Amended A system as claimed in any one of the preceding claims 1,
characterized in that wherein a plate-like element (15) is wound into a spiral shape in order
to form a cylindrical wall (16), such that said plate-like element (15) comprises
substantially parallel stainless steel strips, the stainless steel strips extending in
substantially axial direction after the cylindrical wall (16) has been formed.
8. (Currently Amended A system as claimed in any one of the preceding claims 1,
characterized in that wherein at least some of said rods (10) comprise cooling channels (18)
for guiding a cooling medium.
9. (Currently Amended A system as claimed in any one of the preceding claims 1,
characterized in that wherein at least some of said rods (10) comprise an axially extending
space (19) for accommodating pieces of shim iron.